

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of : Mario Cardozo et al ) Docket No.: 9/182-1-C1  
Serial No. : to be assigned ) Art Unit: to be assigned  
Confirmation No.: to be assigned ) Examiner: to be assigned  
Filed : January 10, 2002 )  
For : Method for Selecting Compounds from a Combinatorial  
or Other Chemistry Library for Efficient Synthesis

Box PATENT APPLICATION  
Assistant Commissioner for Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Please amend the subject application as follows:

Please cancel Claim 1.

Please add Claim 2 as shown on the enclosed sheet entitled "Clean Copy".

Respectfully submitted,



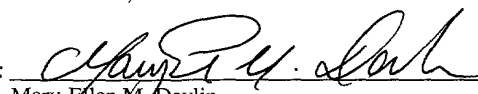
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Dated: January 10, 2002  
Docket No. 9/182-1-C1

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By:



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WHAT IS CLAIMED IS:

2. A method for determining the most efficient synthesis of a representative set of compounds from a large chemical library, which large chemical library has been partitioned into regions of similarity or clusters, each cluster being represented by a skeletal structure having a core, locations for substitutions on the core (specific substituent group location) and a set of substituents for each substituent group location, the improvement which comprises;
- (a) determining the most frequent substituent within a specific substituent group location across the clusters;
  - (b) eliminating all the clusters and their contents for that substituent determined in step a);
  - (c) repeating steps a) and b) for all substituents to produce a first ordered list;
  - (d) repeating steps a), b) and c) for each specific substituent group location to generate second, third, etc. ordered lists;
  - (e) determining the cross-products of each of the lists;
  - (f) eliminating all the clusters covered by such cross-products;
  - (g) repeating steps a) through f) until all clusters have been eliminated; and
  - (h) synthesizing the representative set of compounds according to the results of step (g).